# NETWORK DESIGN/MANAGEMENT

**(A Literature Review Summary)**

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**November 1994**

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# NETWORK DESIGN/MANAGEMENT

**(The Hospital and Physician papers also contain a great deal of information on Network Design/Management)**

## I. BACKGROUND

### A. General

The rapid growth and continued evolution of managed care organizations and arrangements have added new dimensions to a turbulent environment and are accelerating a structural revolution that is reshaping the financing and delivery of health services. To cope successfully with the opportunities and risks associated with managed care, hospitals must shift from traditional ways of conducting business and develop new paradigms of organizational focus, system capability, and managerial competence. There are a number of areas in which hospitals must substantially enhance their levels of organizational competence, including:

1. Analytical capacity, which encompasses financial skills and information management skills.

2. Strategic system integration, which seeks long term relationships with payers and providers based on mutual trust, understanding, and reciprocal enhancement of business goals. Strategic system integration involves strategic management, quality improvement, medical staff bonding, and contract negotiation and administration.

An Integrated Delivery System (IDS) is any organization, or group of affiliated organizations, that provide physician and hospital services to patients. An IDS focuses on the provider side of health care.[3]

An IDS is a tool for solving problems. Typically an IDS helps providers:[3]

- with community planning,
- negotiate with payers,
- access capital, and
- become more competitive.

There is a range of models for establishing an IDS that ranges from loosely structured to those built for equity ownership. More importantly business issues are more significant than the model. Issues fall into categories of:[3]

- Control[2]
- Governance[2]
- Board Composition[2]
- Committees[2]
- Management[2]
- Physician compensation[2]
- Physician Autonomy[2]
- Information Systems[2]
- Specialization[2]

Depending upon the model and governance there are financing, tax and antitrust issues involved in every choice of structure. Additionally, careful consideration must be given to Medicare reimbursement and Fraud and Abuse considerations. There are also significant legal issues involved in the development and implementation of an IDS.

## II. DEGREE OF INTEGRATION[1]

**A.** A broad range of models can be loosely defined as integrated delivery systems.

- *Management Service Bureaus* are hospital-owned subsidiaries that provide management services to physician practices. While these organizations represent an early attempt to bind physicians more closely to hospitals, they do not typically promote economic (other than for purchased administrative services) or clinical relationships among the parties.

- *Group Practices Without Walls* link physicians in private practice through joint purchasing programs, shared administrative expenses, and information systems without requiring them to join a common organization or to share facilities or practice expenses.

- *Physician/Hospital Organizations (PHOs)* are formed (and jointly owned) by hospitals and their medical staffs for the purpose of negotiating managed care contracts on their behalf. PHOs can take several forms, including organizations open to all members of the medical staff (open PHOs), primary-care-only PHOs, and PHOs structured to include only those members of the medical staff who meet established criteria for cost-effectiveness and quality of care (closed PHOs). Some closed PHOs are also designed to reflect the primary care/specialty mix of physicians required to serve a defined population, or "epidemiological model."

- *Medical Services Organizations (MSOs)* are typically subsidiaries of health care systems that acquire the hard assets of physician practices, manage the practices, and negotiate managed care contracts on behalf of the physicians and the health system. In most cases, member physicians continue to control their practice incomes. Increasingly, MSOs are being established by insurers and Blue Cross plans seeking to integrate with the delivery of health care services.

- *Physician Groups* can take various forms, including medical foundations, staff model HMOs, and equity models. Regardless of their legal and/or tax structure, these groups share common characteristics: They are usually owned by a larger health care system; they are governed largely by physicians; and the physicians are salaried, although they may also have incentive compensation arrangements.

- *Integrated Health Care Systems* realize the highest degree of integration. The system owns or controls the entire provider enterprise, including hospitals, physician groups, clinics, and other alternative delivery sites.

It can be forcefully argued that only the tightly organized models can be sustained over time and, therefore, they alone qualify as true integrated delivery systems. Logic dictates that only by employing physicians can a health system bind this group to the financial and health care goals of the organization, measure economic and clinical performances, create strong incentives to build a substantial primary care base, and manage utilization to reduce unnecessary hospitalizations and specialty referrals.

Despite their advanced structure, however, tightly integrated models are subject to many of the same obstacles that impede the development of integration in loosely organized systems. These include the following:

- A shortage of primary care physicians and the surplus of many medical and surgical specialists.

- The mutual mistrust that has historically existed between hospitals and physicians.

- Difficulty shifting from low-risk, volume-based compensation to risk-based contracts and from episodic, disease-oriented medical care to population-based comprehensive care emphasizing prevention and wellness.

- The threat to an organization's financial stability that inadequately controlled costs (hospital, specialist, and service) can pose under capitation and other risk arrangements.

- Lack of adequate information systems support to monitor utilization, improve management processes, and measure quality.

Although tightly integrated systems generally have effective means of solving such problems, their organizational structure does not give them immunity.

While there are operational examples of each model on our list, including the most highly integrated, it is unrealistic to expect communities to suddenly transform disorganized, highly fragmented nonsystems into tightly organized, "seamless" ones. The so-called "transitional" models, such as PHOs, may be around for some time; the intermediate challenge will be to make them work better.

## B. Medical Groups

Information provided by the American Medical Association shows a dramatic increase in the number of medical groups formed in the past 25 years and the number of physicians associated with group practices. In 1965, there were 4,289 physician groups in the United States, with 28,381 physicians in group practice. By 1991, the number of groups had nearly quadrupled to 16,576 with 184,358 physicians--32% of all nonfederal physicians in the country. In addition, the average number of physicians per group increased from 6.6 to 11.5 during the same period, with multispecialty groups increasing from 11.6 to 24.6 physicians per group.[1]

As physicians continue to join group practices and as average group size continues to grow, physician groups will increasingly have the numbers and breadth of representation to negotiate with HMOs and other managed care plans and to assume financial risk. The ability to assume risk, and thus leadership in integrating finance and health care delivery, will be further enhanced as groups merge into larger economic units (as have larger groups in California, such as Mullikin and Friendly Hills).[1]

The percentage of physicians who belong to group practices varies by region. In Minnesota, more than 82% of physicians belong to a group practice, while in New York, only 15% participate in a group practice.[1]

Critical elements for multispecialty groups to succeed are as follows:[2]

- Manage Care
- Accept Risk
- Control Operating Costs
- Have The Data To Manage
- Have A Complete Range Of Services
- Have A Large Primary Care Base
- Have The Size To Dominate A Network
- Have Secure Insurance Relationships
- Have A Low Cost And High Reputation Hospital Affiliation
- Have Capital And Management Resources

## III. RELATIONSHIPS

### A. Physician Management[2]

A rudimentary understanding of physician decision making and management is necessary in the creation of integrated delivery systems and physician group development. Without understanding how physicians make decisions regarding non-clinical issues, it can be difficult to design a productive process.

Physician decision-making in some group practice settings tends to be non-process oriented. In other words, there is a rapid attempt to identify a problem and find a solution. The process is usually driven by data, which is scrutinized with agonizing precision. If the data is flawed or not explained adequately, the process will slow down. Mistakes made by physicians or non-physicians in this setting are not well tolerated. When discussing difficult non-clinical issues within a medical group, the leadership often finds success when all the physicians are equally unhappy with a decision, but are willing to move ahead.

Identifying physician leadership can be the most crucial success factor for physician groups and integrated delivery systems. Physician-leaders need to be respected on a clinical basis by their peers. They must have a natural talent, leadership skills, and inquiring minds with a willingness to question what they previously thought was certain. Management within all health care organizations should be on a constant alert to physician interest in management or leadership roles. Involving physicians in a multitude of educational programs that challenge the clinical, managerial, and futuristic aspects of medicine are an effective

way to pique the interest of potential physician-leaders. Many successful organizations involve physicians in strategic planning, capital budgeting, and more traditional areas, such as clinical quality. Often the best individuals to identify future physician-leaders are the present physician-leaders within the organization. It is increasingly important for health care organizations to identify dynamic, innovative, and courageous physician leadership.

Development of physician leadership is crucial. Extensive education is required. An HMO president who is also a physician once shared that it was much easier to get a "nice person" trained to be an effective medical director than it was to get a highly technically trained, but confrontational medical director, to be a nice person. Once identified, this individual must receive an education in managerial skills. There are many excellent programs that are available part-time as well as full-time to achieve this end.

Every opportunity should be taken to involve the identified physician leadership in managerial discussion, meetings, and processes. Giving this physician role models can be helpful, even if the role model is outside the organization. The education process for the identified physician-leaders should be intense and ongoing. Once a core group of physician-leaders is identified, an ever widening circle of physician leadership should be continually developed. Successful organizations often have several physician-leaders passing through a leadership development program. Physicians ultimately begin teaching other physicians about management skills and begin to create an understanding of the processes necessary to move an organization forward. This core of highly trained physician-leaders, with a widening circle of physician leadership extending around it, may well be the most crucial investment an organization can make in evolving into an integrated delivery system. Investment in this human capital can be likened to the investment in facilities and infrastructure that were made by hospitals in the past. The successful integrated delivery systems of the future will require physician collaboration and leadership. This need should be anticipated and satisfied as organizations move into development of integrated delivery systems.

Trust, education, control and politics also require significant attention when designing integrated delivery systems.[2]

## B. Physician-Hospital Conflict[5]

Physicians who are full-time hospital employees (e.g., of teaching,

municipal, or health maintenance organization-owned hospitals) are prone to face a conflict between their commitments to the hospital and to the medical profession. As physicians, they are committed to the code, standards, and ethics of the medical profession regarding its particular orientations and work expectations. As employees, they are also expected to be committed to their employing hospital even though its standards, hierarchical structure, and bureaucratic apparatus may pose restraints on their professional autonomy. In the classic autonomous model of dual authority structure in hospital-physician relations, the administrative and medical hierarchies are relatively separated. In recent years, however, there has been a shift away from this model and toward a more conjoined model of hospital-physician relations, where the medical and administrative systems are brought more closely together, share authority, and are mutually interdependent. This shift increases the potential for conflict between the two systems. Combined with the tendency on the part of hospitals to increase control over the behavior of physicians, this shift seems to enhance the physician-hospital conflict.

Recent research on physician-hospital conflict has mostly studied physicians in solo practices; only a small proportion were in hospital-based practices. The physician-hospital bond in such cases, or the leverage the hospital may have over physicians, is not as strong as it may be with regard to physicians who are salaried hospital employees. For the latter physicians, dependence on the hospital is rather high. This may be one of the reasons for the reported finding that conflict over clinical autonomy was higher among physicians on salary (hospital-based practice) than among physicians under other hospital control (e.g., exclusive affiliation) strategies. It is therefore interesting to examine the conflict and its predictors under this contingency of relatively strong hospital control over its physicians.

Previous research has indicated that physicians' perceived conflict may be affected by the extent to which the organization facilitates and rewards professional behavior, by the physicians' work orientations, by the characteristics of their jobs, and by influences at the hospital or extra-hospital level. First, we propose that physicians' job characteristics and the way the hospital structures their professional work setting may directly affect the feeling of conflict among hospital physicians. One dimension of this conflict is the extent to which the hospital allows for the realization of the physicians' work expectations. These expectations include opportunities for advancement, professional development, exposure to advanced medical equipment and technologies, and similar work rewards. When the hospital work structure, standards, and regulations are conducive to the realization of

such work expectations, or at least do not curb them, physicians may feel less conflict. Thus physicians' satisfaction with the realization of two dimensions of work expectations was examined here: those intrinsic to the work itself (work autonomy, professional development, advancement, etc.), and those extrinsic to it (work conditions, work relations, etc.). It is hypothesized that the more satisfied the physicians are with the realization in the hospital of their work expectations, particularly the intrinsic ones, the less conflict they feel.

A salient work orientation among physicians is their commitment to their profession. It emphasizes adherence to professional values and the acceptance of collegial rather than hierarchical-organizational authority and control. The professional value system emphasizes values such as collegial authority and control or self-control, conformity to professional standards, professional autonomy, and client orientation. The organizational value system, on the other hand, emphasizes hierarchical authority and control, conformity to organizational rules and procedures, and organizationally oriented behavior. The commitment dilemma may depend on the congruence between the two systems as well as on the level of identification with either system. Stronger professional commitment may lead to a stronger sense of conflict with organizationally imposed demands and job constraints. At the same time, as employees in a professionally oriented organization, physicians may develop commitment to the hospital. Such commitment means identification with organizational values and norms, acceptance of its structures and constraints, and willingness to maintain their career in it. Consequently, in itself strong organizational commitment may reduce the sense of conflict among physicians.

Even though the orientations emphasized by the professional and organizational systems are different, a strong commitment to one does not necessarily mean a weak commitment to the other. Although some physicians may feel committed to one more strongly than to the other, others may be committed to both and may find ways to reconcile the incongruence involved. Thus each of these commitments may affect conflict independently: Professional commitment may increase conflict and organizational commitment may reduce it.

An important characteristic of physicians' jobs is their standing in the hospital. This standing may have two dimensions: professional and positional. Professional standing is reflected in the physician's status as residents or seniors; the positional one is indicated by whether the physician has a tenured or nontenured position and whether the physician occupies a managerial or non-managerial position. It can be

proposed that the residents, who are not distant from their professional socialization at the medical school, will sense more conflict than seniors when faced with the realities of work at the hospital. It can also be proposed that physicians holding managerial positions will perceive less conflict with organizational demands than practicing physicians. Whether physicians have tenure may affect the way they relate to the hospital and, therefore, is also relevant in this context.

Another feature relevant here is the level of job formalization. It can be proposed that the higher the job formalization, the more constrained the physician's work autonomy and consequently the stronger the conflict. On the other hand, it has also been argued that more formalization reduces role ambiguity and consequently may reduce role conflict among professionals. In assessing the effects of job formalization, the possible effect of hospital size ought to be considered. It can be proposed that large hospitals reflect higher levels of bureaucratization than small ones, so that perceived conflict of physicians in them will be stronger than among physicians in small hospitals.

A perspective suggested here is the possible interference with the physicians' work of general hospital policies and top management decisions. It has been suggested that formalization and role delineation may induce positive reactions among health service professionals, who at the same time dislike the more general restricted autonomy that usually accompanies bureaucratic structures. In addition to hospital internal influences, the influence of major external interest groups is proposed here as a possible restrictive influence. Hospitals are open social systems that are exposed to various influences from constituents and stakeholding groups. Such groups may exert influences that promote their own interests, which are not necessarily medical in nature. These influences may affect hospital policies, directives, and top level decisions and therefore should not be overlooked. Publicly owned organizations are commonly characterized by a high level of external politics and administrative intervention. Because the focus in the present study is nonprofit hospitals owned by political organs such as the state, municipalities, and trade unions, the possible effects of political (nonmedical) influences may be accentuated. Hence measured here was the influence of external professional (medical associations) and political (government and other stakeholders) elements. It is proposed that the stronger the external influences on the hospital, the stronger the conflict that physicians feel.

## C. Lessons Learned From Other Integration Efforts[2]

**Physician-Hospital Integration Requires Changes in Attitude and Culture.** These changes must occur both within the hospital and also within the physician group.

**Physician Attitudes Will Change.** This occurs primarily through education and establishing mutual trust.

**Some Physicians Cannot or Will Not Change.** During an introductory educational meeting in the development of the PHO, one senior physician harangued about socialized medicine and was not interested in participating. As would be expected, the early experience is that the established and more senior physicians are the least likely to accept new functional paradigms. Conversely, younger physicians easily embrace new concepts and models.

**Expect Frustration and Dysfunctional Behavior.** This is most commonly observed in department and committee meetings. Recently, the author received "hate" mail from another physician; interestingly, the physician in on the medical staff of one of Saint Joseph's competitors.

**Get Another Perspective.** It is truly amazing what common sense an "outsider," either a consultant or some knowledgeable professional from outside the market area, can bring.

**Look for the Innovators.** Reference is made to those organizations that have cultures that embrace change, that are not prisoners to previous success or previous decisions (i.e., concept of "sunk costs"), and that are willing to take a risk with a new paradigm. Also included in this group are other industries with transferable technology, ideas, or structure. Examples that come readily to mind are the Recovery Inn of Menlo Park, Calif., the Friendly Hills Healthcare Network in LaHabra, Calif., the Mullikin Medical Centers in Calif., the Multidisciplinary Apprentice Program at the University of Utah Hospital, and a culture of integrated clinical practice at Beth Israel Hospital in Boston. An example of possibly transferable technology and expertise might be Stanford University's telecommunication systems for teaching at distributed sites.

**Begin with Small Things.** It is very easy to rush rapidly into a new program or business relationship. However, if a good foundation of trust and communication has not been established, ultimate failure is likely. Unfortunately, time is required for this foundation to develop, but taking time is well worth the effort. As humble as it was, the author's first effort in developing a positive relationship between the hospital and medical staff was the actualizing of a private lunchroom for physicians.

As "mundane" as this seems, physicians continue to refer to it positively. Over these past few years, the hospital approached larger and larger opportunities requiring integration, building on increasing levels of trust, mutual education, and understanding.

**Sponsorship Versus Advocacy.** We need to move from the passivity of sponsorship to the activity of advocacy. If those who sit on the sidelines survive, their futures will be determined by others.

**There is Power in a Positive Vision.** This is one of the many excellent points that Joel Barker makes in his videotapes and presentations.

**The Lack of Institutional Vision Encourages Blind Organizational Behavior.** A corollary of this is that the lack of organizational leadership invites "leadership" from others. These latter individuals commonly have a personal agenda or a bias that is not helpful to either the institution or the medical staff.

**Risk-Averse Behavior Increases Risk.** In the early 1980s, Saint Joseph's demonstrated this point well. There is a major difference in taking a conservative, well-thought-out position, as opposed to taking only those positions that minimize risk. As the institution was minimizing risk, its competitors were positioning themselves in the market, thereby actually increasing the risk.

**Physician Integration is a Market Strategy.** Beyond a doubt, the future of the institution parallels that of physicians. Incentives must be made congruent.

## IV. INDUSTRY TRENDS

### A. Hospitals

The top 10 reasons why many PHO/IDSs are failing and hospitals would have been better off doing nothing include:[8]

1. The specific PHO/IDS model used was based on internal consensus, not payer demands.

2. Off the shelf solutions, which cannot be applied to local market conditions are used.

3. Because it was written up in the literature, an IDS model was copied without performing due diligence.

4. There is a lack of on-site expertise and systems to manage physician practices as they are consolidated.

5. There is a lack of on-site expertise and systems to manage capitation and change clinical practice patterns.

6. In an attempt to be inclusive and not show preference to primary care physicians, the PCPs will eventually seek networks that show their preference.

In cities across the U.S., hospital systems are buying hospitals and physician groups. The powerful economic forces driving this massive consolidation include increasing managed care penetration, self-insured employers exerting increasing control over benefit costs, excess system capacity, and positioning for national reform. The underlying cause is simple: too many physicians and too many hospital beds. To protect and expand their markets, hospitals have begun to develop strategies for securing their physician referral bases. The development of physician-hospital organizations (PHO) is one of the most popular and fastest growing of these. It is estimated that 21% of all hospitals have initiated some form of physician-hospital alliance; 55% of these are PHOs. Most PHOs begin with three main objectives: 1. to establish some legal mechanism for managed care contracting and administration, 2. to begin to manage delivery of care to be more attractive to payers, and 3. to share risks and rewards between the hospital and the physicians.[9]

Hospital systems are rushing to create vertically integrated health care systems that can deliver seamless care to managed care enrolles. The reality is that only a few integrated health care systems which own their managed care organizations and providers will succeed. Regional multi-unit providers that form alliances with a few managed care organizations will outperform most fully integrated systems. They will be able to delivery higher quality for less, and they will be more responsive to managed care organizations and patients. Vertical integration often does not work. Many companies and hospitals are outsourcing, partnering and moving away from vertical integration. In the hospital environment, vertical integration is troublesome because the various components of a vertically integrated system are so different both technically and culturally. It is within this context that strategists must determine their hospital's next move.

In a survey of 250 hospital CEOs, 40% say they are recruiting more primary care physicians today then they have in the past. Hospitals rely

on local and national recruiting efforts, professional word of mouth, and their own residency programs for primary care physicians. Competing for these physicians are a plethora of managed care organizations, single- and multispecialty group practices, and other hospitals. Peter H. Levine of the Medical Center of Central Massachusetts says that at one time, half of the quality medical school graduates went into primary care, but the number is down to 20%. Whether Medicare's resource-based relative value scale (RBRVS) has directly impacted hospitals' ability to recruit primary care physicians is still unknown. Some CEOs say RBRVS has helped hospitals because it persuaded many medical school graduates that primary care independent private practice was not an attractive alternative. Others say it is a failure that will only exacerbate the trend away from primary care until real incentives are found.[11]

Increasing numbers of hospitals are developing formal recruiting functions. More than 25% of hospitals, group practices, and managed care organizations currently have such recruitment functions. Hospital information systems can aid physician recruiting in several ways: 1. by identifying the type of physician to recruit, 2. by supplying data and supporting information about the practice a physician can expect, 3. by reflecting the hospital's image and supporting its plan for the future, 4. by offering the capability to assist with billing as well as regulatory and administrative tasks, and 5. by offering the ability to assist with patient care data. For physician recruiting purposes, hospital information systems should be designed to merge data from disparate sources. The information system must generate flexible ad hoc analyses of practice trends and merged medical, financial and demographic data by physician.[12]

## B. Physicians

Despite the vaunted patient-volume of managed-care organizations and the supposed rise of consumer involvement in medical decision-making, physicians still make most treatment decisions. Both factors have long been expected to erode physicians' power to admit patients to hospitals and their affiliated health care facilities. However, the shift has been minimal and undramatic. In selected instances, however, consumers and managed care are having more of an impact on treatment decisions. A survey of 90,000 consumers by National Research Corporation indicates that physicians solely direct half of all inpatient stays and almost 60% of decisions involving outpatient procedures at hospitals and their affiliated facilities. However, consumers make the choice of hospitals in 41% of cases involving maternity care and in 65% of instances in which emergency treatment is required. Physicians are the primary decision-

makers in only 29% and 19% of these cases, respectively.[13]

Physicians are aware that a large part of what health reform is about is changing the way they think, behave, are employed, get paid, order tests, and treat and hospitalize patients. Doctors want and need clinical autonomy and control: Nothing disturbs doctors more than the intrusion of managed care into clinical decision making. The doctor-patient relationship is sacrosanct and should not be intruded on lightly. The current trend toward depersonalizing medicine is an under-appreciated but insidious problem that if allowed to continue will erode the quality of care, according to physicians. The health care reform plans under consideration address the critical issue of the doctor-patient relationship indirectly, and most physicians' organizations are not happy with what they see.[14]

## C. Integrated Networks

Health care managers are working hard to develop and implement integrated delivery systems because of the growth of managed care, combined with the likely passage of health care reform legislation. F. Lee Shafer, vice president of health care consulting firm The Camden Group, offers lessons to follow or avoid for health care managers embarking on this strategy. The lessons are: 1. Know the strategy. 2. Choose the right physician partners. 3. Work toward a trusting and collegial environment. 4. Allow ample time and resources for the integration process. 5. Focus on primary care physicians. 6. Empower primary care physicians. 7. Shift mentality from hospital to provider organization. 8. Utilize capital prudently. 9. Focus on integrated system market share. 10. Understand the dimensions of control.[15]

Chicago's Northwestern Healthcare Network is one of the most ambitious collaborative networks of integrated systems, and it is still in phase one after some 4 years of planning. The Northwestern Healthcare Network's members will give up their independence and total autonomy effective November 1, 1993, unless one of them pulls out at the last minute. The Northwestern Healthcare Network is dedicated to being a leading regional health care delivery system in the Chicago area that is willing and able to commit to supporting the health status of selected population groups. Northwestern assumes 8 key success factors for its network: 1. stable, organized hospital-physicians entities, 2. ability to manage within capitation, 3. ability to expand and recruit primary care, 4. ability to respond to regional market, 5. groups with market presence, 6. groups with an expanding market share, 7. groups which can document outcomes and service, and 8. meeting physician needs.

The network believes its strengths are: 1. a strong physician and hospital reputation, 2. a strong financial position, 3. a brand identity, 4. an emerging clarity of purpose, 5. system presence, and 6. not competitive with payers.

### D. Reimbursement

As they push for much lower prices on services and much better outcomes, HMOs will be looking for much better capitation deals from hospitals. In addition, hospitals must be prepared to win capitated contracts with HMOs or they will not survive. More risk will be passed down to physicians and hospitals by HMOs in coming years. Hospitals have been too afraid of negotiating capitated contracts for care when they would have only a small group of lives to care for. However, they can successfully begin getting into capitated arrangements with HMOs or employers with a pool of lives much smaller than 3,000 as long as there is adequate stop-loss protection and as long as the contract is carefully negotiated so that it contains protections for the hospital in the event of outlier cases. Above all, hospitals should avoid trying to do capitation or risk-sharing contracts completely on their own.[17]

Capitation is likely to be the primary pricing strategy for managed care plans covering some 70% of the population. Integrated health care systems will be encouraged to act as either managed care organizations (MCO) or subcontractors to MCOs in markets that can support several competitive integrated systems. Anything approaching universal health insurance coverage will increase demand for health care services at the same time that MCOs are implementing new strategies to limit the use of providers' services. A study by Lewin-VHI indicates the potential price pressures hospitals and MCOs are facing and will face as managed care gains even more market share. Using actual insurance company data from Aetna, Humana, and Prudential, Lewin-VHI found that network managed care saved 23% over fee-for-service plans in 1992. Lewin-VHI found some plans are more successful than others because of market competition and the ability to control plan management.[16]

## V. SUMMARY[6]

- The evolution of health care delivery organizations from autonomous points to collaboration and eventually integration will have a profound impact on care management due to financing and leadership implications.

- Within existing models of managed care, ranging from a loosely knit IPA to a totally integrated delivery system of a staff model, the management

of medical care ranges from a command and control mentality to that of system optimization through continuous quality improvement.

- Both state and federal reform proposals will shift the care of individuals to more highly organized systems of care.

- The consolidation of providers into systems of care will facilitate greater risk sharing efficiency and improved outcomes of care. The varied organizational shifts will facilitate the marriage of financial and outcome responsibility and acceptance by the provider community.

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